

margins of the feathers; primaries blackish with white marks on their outer webs. Tail sometimes grayish at the base with white tips, or pure white. Under parts pure white, with a black V-shaped mark near the centre of the feathers on the breast and flanks, gradually growing smaller and fainter, as they approach the abdomen and vent. The white feathers of the legs are hair-like and extend over the toes quite to the nails. Bill black; feet dark brown.

Habitat.—Arctic America, plentiful around Hudson's Bay, but never found within the limits of the United States.

Supplementary note to a "Synopsis of the North American Forms of the
COLYMBIDÆ and PODICEPIDÆ."

BY ELLIOTT COUES.

Since the publication of my paper on the Loons and Grebes of North America, the Smithsonian Institution has received, from J. Hepburn, Esq., of San Francisco, California, what has long been a great desideratum in its collections, a specimen of *Echmophorus Clarkii* in fall plumage. The interest attaching to the elucidation of this hitherto undetermined question in American ornithology induces me to offer the following brief notice of the points in which the nuptial dress differs from the ordinary well known winter plumage. The specimen alluded to, Mr. Hepburn states, was shot in the latter part of April, and is a female.

ECHMOPHORUS CLARKII, COUES.—(Adult female, breeding plumage.)—The chrome yellow of the under mandible, and of the tip and cutting edges of the upper, is very bright, and in marked contrast with the quite pure black of the culmen. The bare loreal space is leaden blue. The crown, occiput, and neck behind are very deep grayish black, almost pure black on the occiput, and fading gradually along the neck, into the blackish gray of the back and upper parts generally, which color is scarcely, if at all, deeper than in the average of winter specimens. The white space between the eye and bill is very broad, and remarkably pure. The throat, neck before, and whole under parts are of a beautiful silky white, the line of demarcation of the black and white on the sides of the head and neck being remarkably distinct. *There is a decided occipital crest*; the feathers of that region are about one inch in length, and have the peculiar filiform character common to the crests of birds of this family. This crest, however, on the dried skin lies quite smoothly, and is not very conspicuous except on raising the feathers. *There are no decided colored ruffs*; but the white feathers of the sides of the head posteriorly, and across the throat, are longer and fuller than elsewhere, particularly the former. Although this elongation is hardly noticeable in the dried skin, it is doubtless sufficient to give to the bird when in life something of the appearance presented by most of the species of this family. In other respects the specimen before me does not differ materially from the winter series.

I have always been of opinion that the two birds which I have recently separated generically from *Podiceps* would not possess the conspicuous colored ruffs for which the type of the genus (*P. cristatus*) is so noted. The supposition to that effect, doubtfully set forth in my last paper, is now verified in the case of one of the species of the genus, and I have no doubt that the nuptial plumage of *Echmophorus occidentalis* will be perfectly analogous to that exhibited by the species under consideration.

A specimen of *Podiceps (Proctopus) californicus*, in full summer plumage, has also been received from Mr. Hepburn. It presents the same marked differences from the European *P. auritus* as do all the other specimens from North America which have fallen under my observation; and is additional confirmation of the position assumed with regard to the specific distinction of the American and European birds. They are quite distinct species and recognizable in either adult or young plumage.

[Sept.